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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/648,781	08/28/2000	Mika Rinne	944-003.011	7731

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EXAMINER

MAIS, MARK A

ART UNIT PAPER NUMBER

2664

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/648,781

Applicant(s)

RINNE, MIKA

Examiner

Mark A Mais

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16 is/are allowed.
- 6) ☒ Claim(s) 17-20 is/are rejected.
- 7) ☒ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 and 6. 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on December 11, 2000, and October 7, 2002 were filed after the mailing date of the Application on August 28, 2000. The submissions are in compliance with the provisions of 37 CFR 1.56 and 1.97. Accordingly, the examiner considered both of the information disclosure statements.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5 and 13 recite the limitations "said measured buffer levels". There is insufficient antecedent basis for these limitations in the claims. Examiner has interpreted the limitations to be (a) a buffer that performs the "storing" step in claim 1, and (b) the "packet storage medium" in claim 9. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA, 35 U.S.C. 102(e)).

5. Claims 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Golden et al. (USP 6,563,793).

6. With regard to claims 17-20, Golden et al. discloses a method and apparatus that receives a packet (ATM, col. 7, line 30) in a first network (**Fig. 3, LAN A**) from a second network (**Fig. 3, LAN B**), said packet having information relating to a quality-of-service requested for said packet (**Fig. 4, host desires connection requests reserved connection with host 52, a path message is routed to router 54 via internet 24, private network 26 to include path and resv messages between host 54 and router 52; see also col. 9, lines 30-46**), determines if the packet requires the requested quality-of-service, classifies the packet according to the requested quality-of-service (**Fig. 4, controller function 64 determines if it can fulfill the packet's requested bandwidth/quality of service, see also col. 9, lines 57-66**) and provides the packet with the requested quality-of-service over the first network (**col. 10, lines 27-30**), otherwise classifies the packet according to a quality-of-service actually experienced by said packet over said second network, provides the packet with a quality-of-service corresponding to the quality-of-service

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experienced by the packet over the second network (**Fig. 4, connection controller 64 provides best effort/next-highest-capacity when no path exists for the requested QoS; see also col. 10, lines 47-57**). Moreover, Golden et al. further discloses that if the requested QoS cannot be achieved because there are not enough resources, an error message is generated and sent out (**Fig. Fig. 4, LAN A is displayed wherein router 54 received the request, from an outside host, for a connection to host 52. If the requested QoS cannot be filed, the switch 56 (downstream) sends a PathErr message upstream, see col. 10, lines 55-57; see also Figs. 9 and 10, wherein host 102 requests a reserved connection, ECP 50 determines if the bandwidth is available, and, if not, informs host 102, and either (a) states that the connection was refused, or (b) advises the host of the next highest available service, col. 14, lines 17-67**).

Allowable Subject Matter

7. Claims 1-4, 6-12, and 14-16 are allowed.
8. Claims 5 and 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
9. The following is a statement of reasons for the indication of allowable subject matter:

The examiner has not found a method or apparatus within a wireless network, which classifies packets destined for various bearers of various mobile terminals according to differing classes, stores those classified packets according to (a) the differing classes and the (b) various bearers of various destination mobile terminals, schedules the stored packets for *possible* transmission according to the various bearers of the destination mobile terminals during one cycle of a packet scheduler, then schedules the stored packets that have been previous scheduled for possible transmission for *actual* transmission according to differing classes, and transmits

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those stored packets during transmission time intervals (TTIs) occurring during the one cycle of the packet scheduler.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

(a) Kawarai et al. (US Patent Publication 20010033581) Packet switch, scheduling device, drop control circuit, multicast control circuit and QoS control device.

(b) Jorgenson, JW (USP 6,594,246) IP-flow identification in a wireless point to multi-point transmission system.

(c) Wacławsky JG (USP 6,449,255) Method and apparatus for managing packets using a real-time feedback signal.

(d) Haddock et al. (USP 6104700) Policy based quality of service.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A Mais whose telephone number is (703) 305-6959. The examiner can normally be reached on 8:00-4:30.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (703) 305-4366. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-6182.

13. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

December 10, 2003


WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER
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